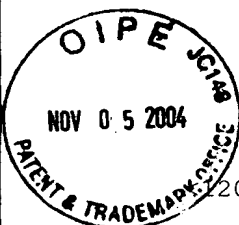


## SEQUENCE LISTING

<110> Institut de Recherches Cliniques de Montreal  
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SEIDAH, Nabil



<20> MAMMALIAN SUBTILISIN/KEXIN ISOZYME SKI-1: A PROPROTEIN CONVERTASE  
WITH A UNIQUE CLEAVAGE SPECIFICITY

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<140> PCT/CA99/01058

<141> 1999-11-04

<150> CA 2,249,648

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Tyr	Phe	Thr	Ala	Lys	Ala	Arg	Asn	Ser	Phe	Ile	Ser	Ser	Ala	Leu	Lys	
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agc	agt	gaa	gtg	gaa	aac	tgg	aga	ata	ata	cct	cgg	aac	aac	cca	tcc	289
Ser	Ser	Glu	Val	Glu	Asn	Trp	Arg	Ile	Ile	Pro	Arg	Asn	Asn	Pro	Ser	
		80				85				90						
agt	gac	tac	cct	agt	gat	ttt	gag	gtg	att	cag	ata	aaa	gag	aag	cag	337
Ser	Asp	Tyr	Pro	Ser	Asp	Phe	Glu	Val	Ile	Gln	Ile	Lys	Glu	Lys	Gln	
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aag	gcg	ggg	ctg	ctc	aca	ctt	gaa	gat	cac	ccc	aac	atc	aag	cgg	gtg	385
Lys	Ala	Gly	Leu	Leu	Thr	Leu	Glu	Asp	His	Pro	Asn	Ile	Lys	Arg	Val	
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aca	ccc	cag	cgg	aaa	gtc	ttt	cgt	tcc	ctc	aag	ttt	gct	gaa	tcc	aac	433
Thr	Pro	Gln	Arg	Lys	Val	Phe	Arg	Ser	Leu	Lys	Phe	Ala	Glu	Ser	Asn	
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ccc	atc	gtg	ccc	tgt	aat	gaa	acc	cgg	tgg	agc	cag	aag	tgg	cag	tca	481
Pro	Ile	Val	Pro	Cys	Asn	Glu	Thr	Arg	Trp	Ser	Gln	Lys	Trp	Gln	Ser	
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tca	cgt	ccc	ctg	aaa	aga	gcc	agt	ctc	tcc	ctg	ggc	tct	gga	ttc	tgg	529
Ser	Arg	Pro	Leu	Lys	Arg	Ala	Ser	Leu	Ser	Leu	Gly	Ser	Gly	Phe	Trp	
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His	Ala	Thr	Gly	Arg	His	Ser	Ser	Arg	Arg	Leu	Leu	Arg	Ala	Ile	Pro	
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Tyr	Thr	Gly	Ala	Asn	Val	Arg	Val	Ala	Val	Phe	Asp	Thr	Gly	Leu	Ser	
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gag	aag	cat	ccg	cat	ttt	aag	aat	gtg	aag	gag	aga	acc	aac	tgg	acc	721
Glu	Lys	His	Pro	His	Phe	Lys	Asn	Val	Lys	Glu	Arg	Thr	Asn	Trp	Thr	
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aat	gag	cgg	acc	ctg	gat	gat	ggg	cta	ggc	cat	ggc	aca	ttc	gtt	gca	769
Asn	Glu	Arg	Thr	Leu	Asp	Asp	Gly	Leu	Gly	His	Gly	Thr	Phe	Val	Ala	
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Ser Lys Ala Lys Ser Arg Pro Lys Arg Arg Arg Pro Arg Ala Lys				
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Tyr Pro Ser Asp Phe Glu Val Ile Gln Ile Lys Glu Lys Gln Lys Ala  
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Gly Leu Leu Thr Leu Glu Asp His Pro Asn Ile Lys Arg Val Thr Pro  
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Gln Arg Lys Val Phe Arg Ser Leu Lys Phe Ala Glu Ser Asn Pro Ile  
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Val Pro Cys Asn Glu Thr Arg Trp Ser Gln Lys Trp Gln Ser Ser Arg  
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Pro Leu Lys Arg Ala Ser Leu Ser Leu Gly Ser Gly Phe Trp His Ala  
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Thr Gly Arg His Ser Ser Arg Arg Leu Leu Arg Ala Ile Pro Arg Gln  
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Gly Ala Asn Val Arg Val Ala Val Phe Asp Thr Gly Leu Ser Glu Lys  
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His Pro His Phe Lys Asn Val Lys Glu Arg Thr Asn Trp Thr Asn Glu  
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Arg Thr Leu Asp Asp Gly Leu Gly His Gly Thr Phe Val Ala Gly Val  
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Ile Ala Ser Met Arg Glu Cys Gln Gly Phe Ala Pro Asp Ala Glu Leu  
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His Ile Phe Arg Val Phe Thr Asn Asn Gln Val Ser Tyr Thr Ser Trp  
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Phe Leu Asp Ala Phe Asn Tyr Ala Ile Leu Lys Lys Met Asp Val Leu  
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Asn Leu Ser Ile Gly Gly Pro Asp Phe Met Asp His Pro Phe Val Asp  
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Lys Val Trp Glu Leu Thr Ala Asn Asn Val Ile Met Val Ser Ala Ile  
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Ser Pro Val Val Ala Gly Ala Val Thr Leu Leu Val Ser Thr Val Gln  
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Lys Arg Glu Leu Val Asn Pro Ala Ser Val Lys Gln Ala Leu Ile Ala  
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Ser Ala Arg Arg Leu Pro Gly Val Asn Met Phe Glu Gln Gly His Gly  
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Lys Leu Asp Leu Leu Arg Ala Tyr Gln Ile Leu Ser Ser Tyr Lys Pro  
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Gln Ala Ser Leu Ser Pro Ser Tyr Ile Asp Leu Thr Glu Cys Pro Tyr  
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Met Trp Pro Tyr Cys Ser Gln Pro Ile Tyr Tyr Gly Gly Met Pro Thr  
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Val Asp Lys Pro Glu Trp Arg Pro Tyr Leu Pro Gln Asn Gly Asp Asn

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Val	Ile	Phe	Ser	Asp	Trp	Tyr	Asn	Thr	Ser	Val	Met	Arg	Lys	Val	Lys
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Val Val Ile Thr Gln Thr Phe Lys Asp Gln Gly Leu Glu Val Leu Lys  
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Gln Glu Thr Ala Val Val Glu Asn Val Pro Ile Leu Gly Leu Tyr Gln  
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Ile Pro Ser Glu Gly Gly Gly Arg Ile Val Leu Tyr Gly Asp Ser Asn  
835 840 845

Cys Leu Asp Asp Ser His Arg Gln Lys Asp Cys Phe Trp Leu Leu Asp  
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Ala Leu Leu Gln Tyr Thr Ser Tyr Gly Val Thr Pro Pro Ser Leu Ser  
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His Ser Gly Asn Arg Gln Arg Pro Pro Ser Gly Ala Gly Leu Ala Pro  
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Pro Glu Arg Met Glu Gly Asn His Leu His Arg Tyr Ser Lys Val Leu  
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Glu Ala His Leu Gly Asp Pro Lys Pro Arg Pro Leu Pro Ala Cys Pro  
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Lys	Gln	Lys	Ala	Gly	Leu	Leu	Thr	Leu	Glu	Asp	His	Pro	Asn	Ile	Lys	
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Gln	Ser	Ser	Arg	Pro	Leu	Arg	Arg	Ala	Ser	Leu	Ser	Leu	Gly	Ser	Gly	
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Phe	Trp	His	Ala	Thr	Gly	Arg	His	Ser	Ser	Arg	Arg	Leu	Leu	Arg	Ala	
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Ile	Pro	Arg	Gln	Val	Ala	Gln	Thr	Leu	Gln	Ala	Asp	Val	Leu	Trp	Gln	
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Gly Lys Lys His Leu Gly Asp Arg Leu Glu Lys Lys Ser Phe Glu Lys
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Ser	Ala Arg Arg Leu Pro 450	Gly Val Asn Met Phe 455	Glu Gln Gly His Gly 460	
Lys 465	Leu Asp Leu Leu Arg 470	Ala Tyr Gln Ile Leu 475	Asn Ser Tyr Lys Pro 480	
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Val	Asp Lys Pro Asp Trp 530	Gln Pro Tyr Leu Pro 535	Gln Asn Gly Asp Asn 540	
Ile 545	Glu Val Ala Phe Ser 550	Tyr Ser Ser Val Leu 555	Trp Pro Trp Ser Gly 560	
Tyr	Leu Ala Ile Ser 565	Ile Ser Val Thr Lys 570	Lys Ala Ala Ser Trp Glu 575	
Gly	Ile Ala Gln Gly His Val 580	Met Ile Thr Val Ala Ser 585	Pro Ala Glu 590	
Thr	Glu Ser Lys Asn Gly Ala 595	Glu Gln Thr Ser Thr 600	Val Lys Leu Pro 605	
Ile	Lys Val Lys Ile Ile 610	Pro Thr Pro Pro Arg 615	Ser Lys Arg Val Leu 620	

Trp Asp Gln Tyr His Asn Leu Arg Tyr Pro Pro Gly Tyr Phe Pro Arg  
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Ile His Thr Asn Phe Arg Asp Met Tyr Gln His Leu Arg Ser Met Gly  
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Gln Tyr Gly Thr Leu Leu Met Val Asp Ser Glu Glu Glu Tyr Phe Pro  
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 <213> Artificial Sequence

<220>  
 <223> i

<220>  
 <221> misc\_feature  
 <222> (3)..(3)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (9)..(9)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (12)..(12)  
 <223> n is a, c, g, or t

<220>  
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 <222> (18)..(18)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (21)..(21)  
 <223> n is a, c, g, or t

<400> 15  
 ggncayggna cnywykknge ngg



<210> 16  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> i

<220>  
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<223> n is a, c, g, or t

<220>  
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<223> n is a, c, g, or t

<220>  
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<222> (9)..(9)  
<223> n is a, c, g, or t

<220>  
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<222> (12)..(12)  
<223> n is a, c, g, or t

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<222> (15)..(15)  
<223> n is a, c, g, or t

<220>  
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<222> (18)..(18)  
<223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (21)..(21)  
<223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (24)..(24)  
<223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (29)..(29)  
<223> n is a, c, g, or t

<400> 16  
ccngynacnw snggnswngc nacnswgtnc c

31

<210> 17

<211> 8  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Xaa represents valine or cysteine.

<220>  
 <221> misc\_feature  
 <222> (5)..(6)  
 <223> Xaa can be any naturally occurring amino acid

<400> 17

Gly His Gly Thr Xaa Xaa Ala Gly  
 1 5

<210> 18  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Xaa represents alanine or threonine.

<220>  
 <221> misc\_feature  
 <222> (4)..(4)  
 <223> Xaa can be any naturally occurring amino acid

<220>  
 <221> misc\_feature  
 <222> (6)..(6)  
 <223> Xaa can be any naturally occurring amino acid

<220>  
 <221> misc\_feature  
 <222> (8)..(8)  
 <223> Xaa can be any naturally occurring amino acid

<220>  
 <221> misc\_feature  
 <222> (10)..(10)  
 <223> Xaa can be any naturally occurring amino acid

<400> 18

Gly Thr Ser Xaa Ala Xaa Pro Xaa Val Xaa Gly  
 1 5 10

<210> 19  
 <211> 28  
 <212> DNA  
 <213> Homo sapiens

<400> 19  
 ggatccgaag aaacatctgg ggcacaga

28

<210> 20  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 20  
 ctcgaggggt ctcagccgtg tgct 24  
  
 <210> 21  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 21  
 gaggaagaga cagggataaa c 21  
  
 <210> 22  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 22  
 gggatatgct tagcattgac 20  
  
 <210> 23  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 23  
 agccctatta cctgaacctg 20  
  
 <210> 24  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 24  
 gaatctgaaa gaactccccc 20  
  
 <210> 25  
 <211> 20

<212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 25  
 ttccgagatt ccatacctacg 20  
  
  
 <210> 26  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 26  
 tgcagctcag caggtctatg 20  
  
  
 <210> 27  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 27  
 tctcctccaa cctcaaccac 20  
  
  
 <210> 28  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 28  
 ccagcctgtc atcctcaata tc 22  
  
  
 <210> 29  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Oligonucleotide  
  
 <400> 29  
 ggagccatgg attgcacttt c 21  
  
  
 <210> 30  
 <211> 20  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Oligonucleotide

<400> 30  
aggagctcaa tgtggcagga 20

<210> 31  
<211> 27  
<212> DNA  
<213> Homo sapiens

<400> 31  
gtgaccatga agcttgtcaa catctgg 27

<210> 32  
<211> 26  
<212> DNA  
<213> Homo sapiens

<400> 32  
acactggtcc ctgagagggc ccggca 26

<210> 33  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 33  
attgacctgg acaaggtggt g 21

<210> 34  
<211> 57  
<212> DNA  
<213> Homo sapiens

<400> 34  
ggatcctcta gatcagtggt ggtggtggtg gtggtgctcc tggtttagc ggccagg 57

<210> 35  
<211> 24  
<212> DNA  
<213> Homo sapiens

<400> 35  
ctcgaggag aggctggctc ttcg 24

<210> 36  
<211> 28  
<212> DNA  
<213> Homo sapiens

<400> 36  
ctcgagtgtc tgggcaacct ggcgcggg 28

<210> 37  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 37

Lys Ala Gly Ser Arg Gly Leu Thr Ser Leu Ala Asp Thr Phe  
1 5 10

<210> 38  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 38

Gly Gly Ala His Asp Ser Asp Gln His Pro His Ser Gly Ser Gly Arg  
1 5 10 15

Ser Val Leu Ser Phe Glu Ser Gly Ser Gly Gly  
20 25

<210> 39  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 39

Trp His Ala Thr Gly Arg His Ser Ser Arg Arg Leu Leu Arg Ala Ile  
1 5 10 15

Pro Arg

<210> 40  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide

<400> 40

Trp His Ala Thr Gly Arg His Ser Ser Arg Arg Leu Leu Arg Ala Leu  
1 5 10 15

Glu

<210> 41  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<400> 41

Ser Arg Arg Leu Leu Arg Ala Leu Glu  
1 5

<210> 42  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 42

Trp Gln Ser Ser Arg Pro Leu Arg Arg Ala Ser Leu Ser Leu Gly Ser  
1 5 10 15

Gly

<210> 43  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 43

Arg Ala Ile Pro Arg Gln Val Ala Gln Thr Leu Gln Ala Asp Val  
1 5 10 15

<210> 44  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 44

Pro Gln Arg Lys Val Phe Arg Ser Leu  
1 5

<210> 45  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 45

Pro Gln Arg Lys Val Phe Arg Ser Leu Lys Tyr Ala Glu Ser Asp  
1 5 10 15

<210> 46  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa can be any naturally occurring amino acid

<220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> Xaa can be any naturally occurring amino acid

<400> 46

Xaa Val Phe Arg Ser Leu Lys Tyr Ala Glu Ser Asp Xaa Ala  
1 5 10

<210> 47  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> misc\_feature  
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<223> Xaa can be any naturally occurring amino acid

<220>  
<221> misc\_feature  
<222> (11)..(11)  
<223> Xaa can be any naturally occurring amino acid

<400> 47

Xaa Arg Ser Leu Lys Tyr Ala Glu Ser Asp Xaa Ala  
1 5 10

<210> 48  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 48

Lys Ala Gly Ser Arg Gly Leu Thr Ser Leu Ala Asp Thr Phe Glu His  
1 5 10 15



<210> 49  
<211> 16  
<212> PRT  
<213> Rattus sp.

<400> 49

Lys	Ala	Gly	Ser	Arg	Gly	Leu	Thr	Thr	Thr	Ser	Leu	Ala	Asp	Thr	Phe
1				5					10					15	

<210> 50  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 50

Arg	His	Ser	Ser	Arg	Arg	Leu	Leu	Arg	Ala	Ile	Pro	Arg	Gln	Val	Ala
1				5					10					15	

<210> 51  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 51

Arg	Lys	Val	Phe	Arg	Ser	Leu	Lys	Tyr	Ala	Glu	Ser	Asp	Pro	Thr	Val
1				5					10					15	

<210> 52  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 52

Thr	Pro	Gln	Arg	Lys	Val	Phe	Arg	Ser	Leu	Lys	Tyr	Ala	Glu	Ser	Asp
1				5					10					15	

<210> 53  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 53

Val	Thr	Pro	Gln	Arg	Lys	Val	Phe	Arg	Ser	Leu	Lys	Lys	Tyr	Ala	Glu
1				5					10					15	

<210> 54  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 54

Ser Gly Ser Gly Arg Ser Val Leu Ser Phe Glu Ser Gly Ser Gly Gly  
1 5 10 15

<210> 55

<211> 16

<212> PRT

<213> Homo sapiens

<400> 55

His Ser Pro Gly Arg Asn Val Leu Gly Thr Glu Ser Arg Asp Gly Pro  
1 5 10 15

<210> 56

<211> 16

<212> PRT

<213> Rattus sp.

<400> 56

Ala Ser Val Gly Arg Leu Ala Leu Ser Gln Glu Glu Pro Ala Pro Leu  
1 5 10 15

<210> 57

<211> 16

<212> PRT

<213> Homo sapiens

<400> 57

Arg Ile Ser Asp Arg Asp Tyr Met Gly Trp Met Asp Phe Gly Arg Arg  
1 5 10 15

<210> 58

<211> 16

<212> PRT

<213> Rattus sp.

<400> 58

Asp Pro Arg Leu Arg Gln Phe Leu Gln Lys Ser Leu Ala Ala Ala Thr  
1 5 10 15

<210> 59

<211> 16

<212> PRT

<213> Bovis sp.

<400> 59

Leu Leu Lys Glu Leu Gln Asp Leu Ala Leu Gln Gly Ala Lys Glu Arg  
1 5 10 15

<210> 60  
<211> 16  
<212> PRT  
<213> Bovis sp.

<400> 60

Met	Ala	Arg	Ala	Pro	Gln	Val	Leu	Phe	Arg	Gly	Gly	Lys	Ser	Gly	Glu
1				5					10					15	

<210> 61  
<211> 16  
<212> PRT  
<213> Bovis sp.

<400> 61

Glu	Leu	Glu	Asn	Leu	Ala	Ala	Met	Asp	Leu	Glu	Leu	Gln	Lys	Ile	Ala
1				5					10					15	

<210> 62  
<211> 16  
<212> PRT  
<213> Bovis sp.

<400> 62

Ala	Ala	Met	Asp	Leu	Glu	Leu	Gln	Lys	Ile	Ala	Glu	Lys	Phe	Ser	Gly
1				5					10					15	

<210> 63  
<211> 16  
<212> PRT  
<213> Rattus sp.

<400> 63

Lys	Ser	Ser	Phe	Thr	Asn	Val	Thr	Ser	Pro	Val	Val	Leu	Thr	Asn	Tyr
1				5					10					15	

<210> 64  
<211> 16  
<212> PRT  
<213> Rattus sp.

<400> 64

Lys	Ser	Gln	Thr	Pro	Leu	Val	Thr	Leu	Phe	Lys	Asn	Ala	Ile	Ile	Lys
1				5					10					15	

<210> 65  
<211> 16  
<212> PRT  
<213> Rattus sp.

<400> 65

Ser Gln Thr Pro Leu Val Thr Leu Phe Lys Asn Ala Ile Ile Lys Asn  
 1 5 10 15

<210> 66  
 <211> 16  
 <212> PRT  
 <213> Rattus sp.

<400> 66

Gly Pro Ala Arg Glu Leu Leu Leu Arg Leu Val Gln Leu Ala Gly Thr  
 1 5 10 15

<210> 67  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 67

Leu Leu Arg Lys Lys Arg Thr Thr Ser Ala Glu Lys Asn Thr Cys Gln  
 1 5 10 15

<210> 68  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 68

Glu Glu Ile Ser Glu Val Lys Met Asp Ala Glu Phe Arg His Asp Ser  
 1 5 10 15

<210> 69  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 69

Glu Glu Ile Ser Glu Val Asn Leu Asp Ala Glu Phe Arg His Asp Ser  
 1 5 10 15

<210> 70  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 70

Ile Ser Glu Val Lys Met Asp Ala Glu Phe Arg His Asp Ser Gly Tyr  
 1 5 10 15

<210> 71

<211> 16  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 71  
  
 Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys Leu Val  
 1 5 10 15

<210> 72  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide

<400> 72  
  
 Ser Ser Arg Arg Leu Leu Arg Ala Ile Glu  
 1 5 10

<210> 73  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 73  
  
 Ser Gly Ser Gly Arg Ser Val Leu Ser Phe Glu Ser  
 1 5 10

<210> 74  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide

<220>  
 <221> misc\_feature  
 <222> (1)..(1)  
 <223> Xaa can be any naturally occurring amino acid

<220>  
 <221> misc\_feature  
 <222> (13)..(13)  
 <223> Xaa can be any naturally occurring amino acid

<400> 74  
  
 Xaa Arg His Ser Ser Arg Arg Leu Leu Arg Ala Ile Xaa Ala  
 1 5 10

<210> 75

<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Xaa represents 3-nitrotyrosine.

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa can be any naturally occurring amino acid

<220>  
<221> misc\_feature  
<222> (11)..(11)  
<223> Xaa can be any naturally occurring amino acid

<400> 75

Xaa Ser Arg Arg Leu Leu Arg Ala Leu Glu Xaa Ala  
1 5 10

<210> 76  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide

<220>  
<221> misc\_feature  
<222> (1)..(1)  
<223> Xaa can be any naturally occurring amino acid

<220>  
<221> misc\_feature  
<222> (14)..(14)  
<223> Xaa can be any naturally occurring amino acid

<400> 76

Xaa Asn Gly Pro Lys Ala Gly Ser Arg Gly Leu Thr Ser Xaa Ala  
1 5 10 15

<210> 77  
<211> 11  
<212> PRT  
<213> Artificial

<220>  
<223> peptide

<400> 77

Val Phe Arg Ser Leu Lys Tyr Ala Glu Ser Asp  
1 5 10

<210> 78  
<211> 9  
<212> PRT  
<213> Artificial

<220>  
<223> peptide

<400> 78

Lys Arg Phe Val Phe Asn Lys Ile Glu  
1 5